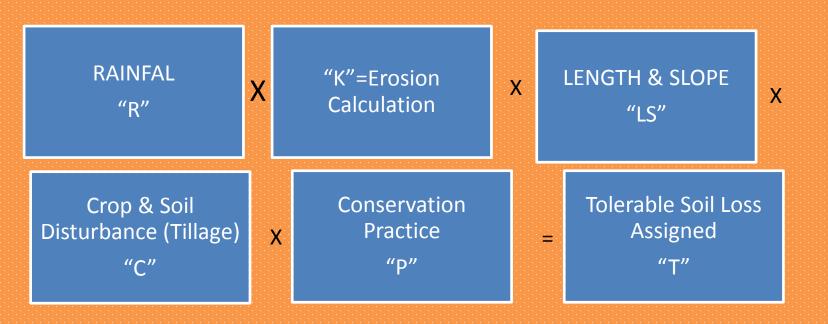


TOLERABLE SOIL LOSS

 RUSLE2 & SNAP+ remain based on the soil loss formula of:

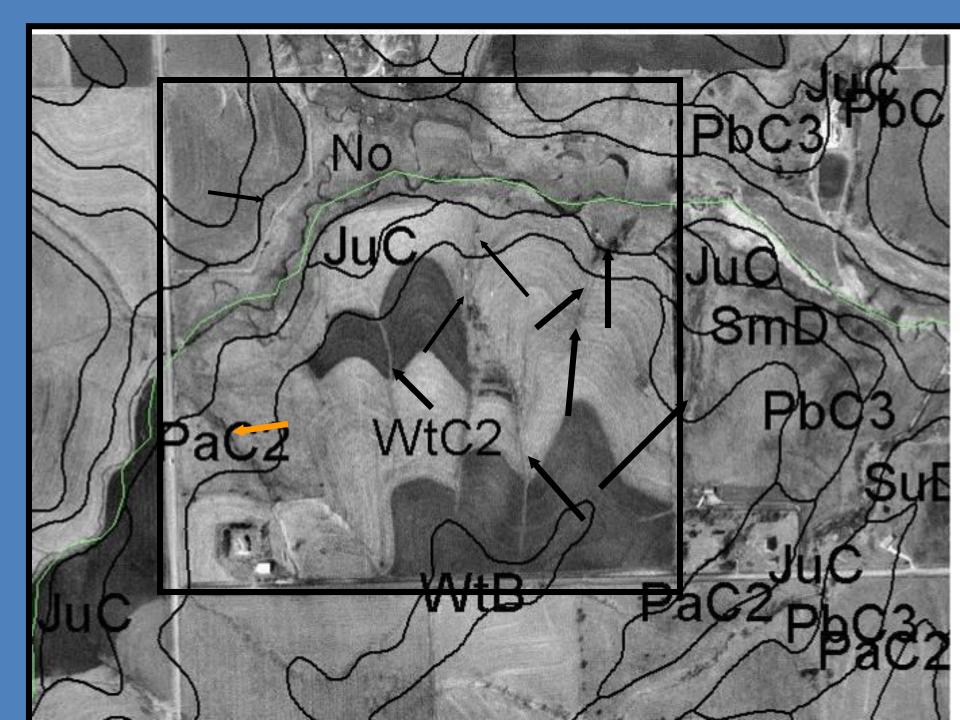


Why the Changes?

- Updates reflect the latest research findings
- New soil property data is collected
- Soils are mapped in greater detail
- More accurate estimates of T and K Factors are made
- Improved guidelines based on current research
- More accuracy across soil survey lines-detailed correlations
- More uniformity in the data bases which enhances reliability

Soil Updates May include:

- Series Name
 Defines the soil properties found at the site examples: Depth to Bedrock, horizons, %s-si-cl
- Tolerance "T" value
 Maximum amount of annual sheet and rill erosion
 that allows the fertility and productive capacity
 of the soil to be maintained
- "K" Factor
 Quantifies susceptibility of the soil to sheet & rill erosion. Includes: texture, organic matter, structure, infiltration, permeability testing



ARS – National Erosion Lab – Purdue University



Lysimeter Above Ground Coshocton ARS

K (Erosion Factor) ranges from .02 to .64

Those values are taken from lab testing and simulation studies





Current Soil Scientists Dig lots of holes

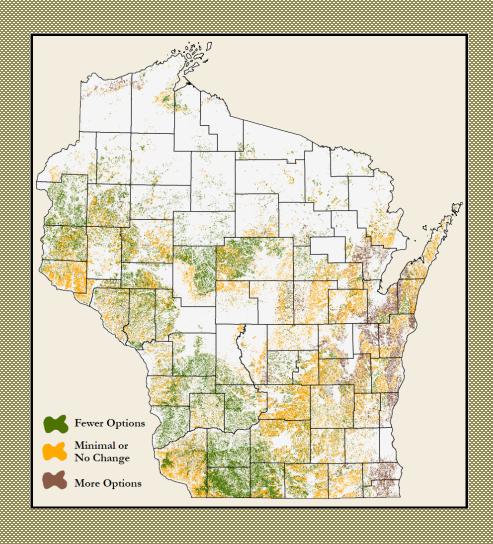
- 1. Infiltration Study
- 2. Profiles
- 3. Texturing and Testing



SOIL DATA JOIN RECORRELATION "SDJR"

- Seamless Data that can be used cleanly across all lines
- Correlates quickly to soil updates
- Provides the background to make geospatial presentation possible
- Allows for new interpretation and rectification of data

Wisconsin Soil Erosion Factor Update



IMPACT OF CHANGES TO T & K

- Decreasing T reduces the amount of erosion tolerated. Planning is more limited.
- Increasing the K (Erosion Factor) will result in more limitations to planning.

**These changes are reflected in SNAP+ and RUSLE2. Soil Data Updates occur in October each year. R2 updates generally occur in January. 590 Planning requires farming to "T"

ARE THERE ANY SOILS QUESTIONS?

